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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.

EXAMINER	
ART UNIT	PAPER NUMBER
	14

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
09/206,458	Greaves et al.
Examiner	**Group Art Unit**
Christopher Tate	1651

X Responsive to communication(s) filed on *Sep 18, 2000* .

X This action is **FINAL.**

Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *3* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

X Claim(s) *1-26* is/are pending in the application.

Of the above, claim(s) *24-26* is/are withdrawn from consideration.

Claim(s) _____ is/are allowed.

X Claim(s) *1-23* is/are rejected.

Claim(s) _____ is/are objected to.

Claims _____ are subject to restriction or election requirement.

Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on _____ is/are objected to by the Examiner.

The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____ .

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____ .

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

--- ***SEE OFFICE ACTION ON THE FOLLOWING PAGES*** ---

DETAILED ACTION

The amendment filed September 18, 2000 is acknowledged and has been entered. Claims 1-23 have been examined on the merits. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

Claims 1-7, 9, 10, 12-14, and 19-23 stand rejected under 35 U.S.C. 102(a) as being anticipated by Nicola (GB 2,324,050) for the reasons set forth in the previous Office action which are restated below.

Nicola teaches a method of extracting one or more compounds including polar components from organic materials such as botanical materials using a mixture of tetrafluoroethane and one or more cosolvents, wherein the cosolvents can be methanol and/or acetone, among others. Nicola discloses contacting the organic material with the solvent mixture, transferring the solvent extract into an evaporator flask (thus, removing the organic material therefrom), and evaporating the solvent blend to obtain the desired product containing one or more polar components, including a botanical oil product from *Rosemarinus officinalis* (see, e.g., page 1, lines 8-22, page 3, lines 10-33, page 4, lines 1-31, page 5, lines 11-26, page 6, lines 13-30, the Examples on pages 7-11, and claims). The final isolated products disclosed by Nicola would inherently contain the two or more components instantly claimed. Other claimed functional limitations would also inherently be met by the cited reference.

Therefore, the reference is deemed to anticipate the instant claims above.

Claims 1-6, 12-15, and 18-21 stand rejected under 35 U.S.C. 102(b) as being anticipated by Powell et al. (WO 95/26794) for the reasons set forth in the previous Office action which are restated below.

Powell et al. teach a method of extracting a natural product (e.g., flavored/edible oils and aromatic oils) from organic materials such as botanical materials using a mixture of tetrafluoroethane and one or more cosolvents, wherein the cosolvents comprise butane, among others. Powell et al. disclose contacting the material with the solvent mixture, removing the material therefrom, then removing the solvent blend via evaporation and distillation to obtain the desired product (see, e.g., pages 2, 4-5, 7-8, Examples, and claims). The final isolated products disclosed by Powell et al. would inherently contain the two or more components instantly claimed. Other claimed functional limitations would also inherently be met by the cited reference.

Therefore, the reference is deemed to anticipate the instant claims above.

Claims 1 and 12-14 stand rejected under 35 U.S.C. 102(b) as being anticipated by Kimura et al. (USP 4,380,506) for the reasons set forth in the previous Office action which are restated below.

Kimura teaches a method of effectively obtaining polar antioxidant compounds from botanical materials using a mixture of solvents including acetone, methanol and hexane mixtures, wherein the botanical material is contacted with the solvent mixture, the botanical material is removed (filtered off), and the solvent blend is then removed via distillation (see, e.g., col 4, lines

3-53, col 5, lines 1-37, col 6, lines 47-52, cols 8-9, Example 2, and claims). The final isolated products disclosed by Kimura would inherently contain the two or more components instantly claimed. Therefore, the reference is deemed to anticipate the instant claims above.

With respect to the USC 102 rejections above, applicants' arguments have been carefully considered but are not deemed to be persuasive of error in the rejection. Applicants argue that the examiners assertion that the final products disclosed by each of the cited references would inherently contain the two or more components instantly claimed is conclusionary and unsupported. However, based upon the similarity of the reference methods to that of the instantly disclosed/claimed method (e.g., using the solvent blends instantly disclosed/claimed and the various solvent blends taught by the cited references), the extract products obtained thereby would necessarily and inherently result in the extraction from the taught organic/botanical material of more than one of the broadly claimed components therefrom (i.e., it is not reasonable nor readily conceivable that only one purified isolated claimed component, and no other, would be obtained using the claimed method).

Claim Rejections - 35 USC § 103

Claims 1-23 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Nicola in view of Kimura et al for the reasons set forth in the previous Office action which are restated below.

The cited references are relied upon for the reasons set forth above.

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to obtain botanical compounds such as disclosed by Nicola by further including various other art-accepted cosolvents such as those taught by Kimura et al. to effectively obtain desired compounds and/or oils therefrom for the benefits disclosed therein. Adapting and choosing particular mixtures and amounts of such cosolvents and employing particular conventional working conditions (e.g., evaporation via the film evaporation techniques claimed or using art-recognized column distillation to distill the organic solvents therefrom) are deemed merely matters of judicious selection and routine optimization which are well within the purview of the skilled artisan.

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Claims 1-23 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Powell et al. and Kimura et al. for the reasons set forth in the previous Office action which are restated below.

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to obtain botanical compounds such as disclosed by Powell et al. by further including various other art-accepted cosolvents such as those taught by Kimura et al. to effectively obtain desired compounds and/or oils therefrom, including from rosemary (*Rosemarinus officinalis*) as also taught by Kimura, for the benefits disclosed therein. Adapting and choosing particular mixtures and amounts of such cosolvents and employing particular conventional working conditions (e.g., evaporation via the film evaporation techniques claimed or using art-recognized column distillation to distill the organic solvents therefrom) are deemed merely matters of judicious selection and routine optimization which are well within the purview of the skilled artisan.

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

With respect to the USC 103 rejections above, applicants' arguments have been carefully considered but are not deemed to be persuasive of error in the rejection, especially in view of the above discussion concerning the USC 102 rejections.

In response to applicants' argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgement on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicants' disclosure, such a reconstruction is proper.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

No claim is allowed.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R. Tate whose telephone number is (703) 305-7114. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Wityshyn, can be reached at (703) 308-4743. The Group receptionist may be reached at (703) 308-0196. The fax number for art unit 1651 is (703) 308-4242.

Christopher R. Tate
Primary Examiner, Group 1651
November 21, 2000